Comparing Medicine Combinations Used to Treat Schizophrenia

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What was the research about?
Schizophrenia is a serious mental health problem that can affect how a person thinks, feels, and behaves. It may cause people to see or hear things that aren't there. Standard treatment includes medicine and therapy. Many people with schizophrenia take more than one medicine at a time to treat their mental health symptoms.

In this study, the research team wanted to learn how different combinations of medicines affected people with schizophrenia. The team looked at Medicaid records for people who were already taking an antipsychotic medicine, the most common type of medicine doctors use to treat schizophrenia, and then added one of the following types of medicines:

- **An antidepressant.** This is a medicine doctors often use to treat depression.
- **A benzodiazepine.** This is a medicine doctors often use to treat anxiety.
- **A mood stabilizer.** This is a medicine doctors often use to treat strong mood swings.

The research team compared people who added one of these types of medicine with people who instead started using a second antipsychotic medicine.

What were the results?
Compared with people with schizophrenia who started using a second antipsychotic medicine,

- People who instead added an antidepressant had a lower risk of going to an emergency room or a hospital for a mental health issue and a lower risk of getting diabetes
- People who instead added a benzodiazepine had a higher risk of going to the hospital or emergency room for a mental health issue
- People who instead added a mood stabilizer had a higher risk of dying from any cause

People across the groups had a similar risk of hurting themselves on purpose or having a heart attack or stroke.

Who was in the study?
The research team looked at Medicaid records for 81,921 adults ages 18–64 with schizophrenia. Of these people, 39 percent were black, 36 percent were white, 3 percent were Asian, 2 percent were Hispanic, and 1 percent was Hawaiian or Pacific Islander. In addition, 10 percent were more than one race, and 10 percent were an unknown race. The average age was 40, and 54 percent were men.

What did the research team do?
The research team looked at Medicaid records from 2001 to 2010 across 44 states. The team compared what happened to people already taking an antipsychotic for one year after they started one of the four additional types of medicines to treat their schizophrenia.
A patient advocate and a group including patients, family members, policy makers, and clinicians gave input to the research team throughout the study.

**What were the limits of the study?**
The research team didn't assign people by chance to add the different medicines. For this reason, the team can't say for sure that the type of medicine added was the reason for the difference in risks. This study only included people ages 18–64 who had Medicaid. Results may differ for people of other ages or with other insurance.

Future studies could follow patients taking the different types of medicines going forward instead of looking at past records. Researchers could also look more closely at when adding an antidepressant medicine is best for treating people with schizophrenia.

**How can people use the results?**
People with schizophrenia and their doctors can use these results when considering adding medicines to their treatment.

*To learn more about this project, visit www.pcori.org/Stroup206.*